

What is claimed is:

1. An apparatus for connecting to an orthopedic implant, comprising:
  - a base having a relatively forward end and a relatively rearward end;
  - a shaft connected to said base, said shaft being slidable with respect to said base between first and second positions;
  - a plate having an aperture, said plate being pivotably connected to said shaft, such that when said shaft is in said first position said plate is in a position for locking to an implant, and when said shaft is slid to said second position, said plate pivots to a position for accepting insertion of a part of an implant; and
  - a sleeve at least partially surrounding said rod and being slidable along said rod and slidable with respect to said base and said plate.
2. The apparatus of claim 1, further comprising a ratchet mechanism connected to said base and said sleeve, said ratchet mechanism operable to move said sleeve with respect to said base, said shaft and said plate.
3. The apparatus of claim 2, further comprising a handle including an actuator movably connected to said base, said actuator operating said ratchet mechanism when said actuator is moved relative to said base.

4. The apparatus of claim 3, wherein said actuator is pivotably connected to said base, said actuator operating said ratchet mechanism when said actuator is pivoted relative to said base.
5. The apparatus of claim 4, wherein said handle further includes a stock rigidly connected to said base.
6. The apparatus of claim 5, further comprising at least one spring between said actuator and said stock, said at least one spring tending to bias the actuator and stock apart.
7. The apparatus of claim 6, wherein said at least one spring comprises a leaf spring.
8. The apparatus of claim 6, wherein said at least one spring comprises a first leaf spring connected to said actuator and a second leaf spring connected to said stock, wherein said leaf springs are connected together so as to bias the actuator and stock apart.
9. The apparatus of claim 6, further comprising a stop connected to said base, said stop having a first position connected to said ratchet mechanism so that movement in a rearward direction of said sleeve is limited, and a second position disengaged from said ratchet mechanism so that said sleeve can be moved in a rearward direction.

10. The apparatus of claim 9, wherein said stop is spring-biased toward said first position.
11. The apparatus of claim 2 further comprising a stop connected to said base, said stop having at least one position connected to said ratchet mechanism in which movement in a rearward direction of said sleeve is limited, and a position disengaged from said ratchet mechanism so that said sleeve can be moved in a rearward direction.
12. The apparatus of claim 11, wherein said stop comprises at least one pawl that is pivotable between said at least one position connected to said ratchet mechanism and said position disengaged from said ratchet mechanism.
13. The apparatus of claim 12 wherein said stop comprises three pawls capable of operating independently of each other.
14. The apparatus of claim 13 wherein said pawls are nested.
15. The apparatus of claim 1, wherein said aperture of said plate is at least partially tapered.
16. The apparatus of claim 15, wherein said aperture of said plate has a constant diameter section.

17. The apparatus of claim 15, wherein said plate includes a roughened surface adjacent said aperture.
18. The apparatus of claim 1, wherein said aperture of said plate is uniformly tapered.
19. The apparatus of claim 1, wherein said plate includes a rounded surface and said shaft includes an indentation, and said indentation and said rounded surface are adjacent each other.
20. The apparatus of claim 1, wherein said plate includes a rounded surface that facilitates pivoting of said plate.
21. The apparatus of claim 1, wherein said sleeve includes an end portion adapted to contact at least one of the group consisting of a spinal rod, an orthopedic connector, and an orthopedic plate.
22. The apparatus of claim 1, wherein said shaft includes an elongated portion and a plunger portion connected to each other.
23. The apparatus of claim 22, wherein said elongated portion includes a tongue and said plunger portion includes a groove, and said tongue is at least partially within said groove.

24. The apparatus of claim 22, further comprising at least one spring abutting said plunger to bias said plunger toward said relatively forward end of said base.
25. The apparatus of claim 22, further comprising at least two springs abutting said plunger to bias said plunger toward said relatively forward end of said base.
26. The apparatus of claim 25, wherein said springs are substantially concentric.
27. The apparatus of claim 1, wherein said base comprises an upper base portion and a lower base portion connected together.
28. The apparatus of claim 27, further comprising a closure connected to said upper base portion and said lower base portion, wherein closing said closure holds said base portions together, and opening said closure allows separation of at least a part of said upper base portion from at least a part of said lower base portion.
29. The apparatus of claim 28, wherein said closure includes a latch.
30. The apparatus of claim 28, wherein said base portions are pivotably connected, whereby opening said closure allows said base portions to pivot with respect to each other.

31. The apparatus of claim 27, wherein said base portions are pivotably connected together.

32. A method, comprising:

inserting an orthopedic implant into a bone, said implant including an extending portion;

inserting an elongated member adjacent to said implant;

providing an apparatus including a shaft, a plate having an aperture pivotably connected to said shaft, and a sleeve slidable with respect to said shaft and said plate;

inserting said extending portion of said implant into said aperture of said plate;

moving said shaft to pivot said plate, so that said plate secures to said extending portion of said implant; and

sliding said sleeve with respect to said rod and said plate and against said elongated member, so that said extending portion of said implant and said elongated member are moved with respect to each other.

33. The method of claim 32, wherein said sliding step is at least partially performed by squeezing a handle connected to said sleeve.

34. The method of claim 32, further comprising the step of moving said shaft to pivot said plate, so that said plate is in a position allowing said inserting step to occur.

35. The method of claim 34, wherein said step of moving said shaft to pivot said plate so that said plate is in a position allowing said inserting step to occur is performed by pulling said shaft in a direction substantially away from said implant.

36. The method of claim 32, wherein said sliding step is repeated a sufficient number of times so that said implant and said elongated member are adjacent each other.

37. The method of claim 32, wherein said moving step is performed by a biasing spring.

38. An apparatus for use in orthopedic surgery, comprising:

a plate member having first and second edges substantially opposite each other and an aperture; and

a shaft connected to said plate member adjacent said first edge of said plate member, said shaft being movable to pivot said plate member substantially around said second edge of said plate,

wherein said aperture is sized to allow insertion of at least part of an orthopedic implant, and wherein said plate member has a first position in which said aperture is relatively open and such insertion can be accomplished, and a second position in which said aperture is relatively closed and said plate can contact the orthopedic implant.

39. The apparatus of claim 38, further comprising a sleeve slidable with respect to said shaft.

40. The apparatus of claim 39, wherein said sleeve includes an end portion adapted to contact at least one of the group consisting of a spinal rod, an orthopedic connector, and an orthopedic plate.

41. The apparatus of claim 39, further comprising a ratchet mechanism operable to move said sleeve with respect to said shaft and said plate.

42. The apparatus of claim 39, further comprising a base connected to said shaft.

43. The apparatus of claim 42, further comprising an actuator movably connected to said base, said actuator operating said ratchet mechanism when said actuator is moved relative to said base.

44. The apparatus of claim 42, further comprising a stock connected to said base.

45. The apparatus of claim 44, further comprising a first leaf spring connected to said actuator and a second leaf spring connected to said stock, wherein said leaf springs are connected together so as to bias the actuator and stock apart.

46. The apparatus of claim 42 further comprising a stop connected to said base, said stop having at least one position connected to said ratchet mechanism in which



movement in a rearward direction of said sleeve is limited, and a position disengaged from said ratchet mechanism so that said sleeve can be moved in a rearward direction.

47. The apparatus of claim 46, wherein said stop comprises at least one pawl that is pivotable between said at least one position connected to said ratchet mechanism and said position disengaged from said ratchet mechanism.

48. The apparatus of claim 47 wherein said stop comprises three pawls capable of operating independently of each other.

49. The apparatus of claim 48 wherein said pawls are nested.

50. The apparatus of claim 42, wherein said base comprises an upper base portion and a lower base portion connected together.

51. The apparatus of claim 50, further comprising a closure connected to said upper base portion and said lower base portion, wherein closing said closure holds said base portions together, and opening said closure allows separation of at least a part of said upper base portion from at least a part of said lower base portion.

52. The apparatus of claim 51, wherein said closure includes a latch.

53. The apparatus of claim 51, wherein said base portions are pivotably connected, whereby opening said closure allows said base portions to pivot with respect to each other.

54. The apparatus of claim 50, wherein said base portions are pivotably connected together.

55. The apparatus of claim 38, wherein said aperture of said plate is at least partially tapered.

56. The apparatus of claim 55, wherein said aperture of said plate has a constant diameter section.

57. The apparatus of claim 38, wherein said aperture of said plate is uniformly tapered.

58. The apparatus of claim 38, wherein said plate includes a roughened surface adjacent said aperture.

59. The apparatus of claim 38, wherein said plate includes a rounded surface and said shaft includes an indentation, and said indentation and said rounded surface are adjacent each other.

60. The apparatus of claim 38, wherein said plate includes a rounded surface that facilitates pivoting of said plate.
61. The apparatus of claim 38, wherein said shaft includes an elongated portion and a plunger portion connected to each other.
62. The apparatus of claim 61, wherein said elongated portion includes a tongue and said plunger portion includes a groove, and said tongue is at least partially within said groove.
63. The apparatus of claim 61, further comprising at least one spring abutting said plunger to bias said plunger toward said relatively forward end of said base.
64. The apparatus of claim 61, further comprising at least two springs abutting said plunger to bias said plunger toward said relatively forward end of said base.
65. The apparatus of claim 64, wherein said springs are substantially concentric.
66. The apparatus of claim 38, further comprising a lever connected to said shaft, wherein operating said lever causes said shaft to move, thereby pivoting said plate.
67. The apparatus of claim 38, further comprising a slider connected to said shaft, wherein operating said slider causes said shaft to move, thereby pivoting said plate.